

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated April 21, 2006 (U.S. Patent Office Paper No. 20060417). In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 22-35 stand for consideration in this application, wherein claims 22-35 are being amended to more particularly point out and distinctly claim the subject invention. All amendments to the claims are fully supported in the specification. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Formal Objections or Rejections

The Examiner rejected claims 22-35 under 35 U.S.C. § 112, second paragraph, for being indefinite. Specifically, the Examiner cited language in the claims which he considered to be indefinite.

As outlined above, the claims have been amended in accordance with the Examiner's requirements. Thus, Applicant will submit that the claims now more particularly point out and distinctly claim the subject invention.

Prior Art Rejections

The Examiner rejected claims 22-33 under 35 U.S.C. §103(a) as being unpatentable over Labview Quickstart Guide, National Instruments, February 1999, pp. 1-1 through 4-9 ("Labview") in view of Krueter (US Patent No. 6,392,557) and Licht et al. (US Patent No. 5,947,748). Further, the Examiner rejected claims 34-35 under 35 U.S.C. §103(a) as being unpatentable over Labview in view of Krueter '557 and Licht '748, and further in view of Jones et al. (US Patent No. 6,513,068). Applicants have reviewed the above-outlined rejections and hereby respectfully traverse.

The present invention as now recited in claim 22 is directed to a control system for integrating legacy subsystems with modern control devices, comprising: at least one legacy subsystem that generates discrete output signals; at least one legacy controller operatively

coupled to receive the discrete output signals therefrom and to output control signals to the at least one legacy subsystem; an integrated signal conditioning circuit operatively connected between the at least one legacy subsystem and the at least one legacy controller so as to condition at least one of the output signals and control signals being communicated therebetween; and a master controller operatively connected to control operation of the integrated signal conditioning circuit so as to control the conditioning of at least one of the output signals and control signals being communicated therethrough, and to control operation of the at least one legacy controller.

As recited in claim 26, the present invention is directed to a method for controlling a system that integrates legacy subsystems with modern control devices, comprising the steps of: generating discrete output signals from at least one legacy subsystem; generating control signals from at least one legacy controller in response to the output signals from the at least one legacy subsystem; conditioning at least one of the output signals and control signals being communicated between the at least one legacy subsystem and at least one legacy controller; and controlling via a master controller an operation of the at least one legacy controller and the conditioning of at least one of the output signals and control signals.

Further, as recited in claim 30, the present invention is directed to a mail sorting system that integrates legacy subsystems with modern control devices, comprising: at least one legacy subsystem that generates discrete sensor output signals; at least one legacy controller operatively coupled to receive the discrete sensor output signals therefrom and to output control signals in response thereto; an integrated signal conditioning circuit operatively connected between the at least one legacy subsystem and the at least one legacy controller so as to condition at least one of the output signals and control signals being communicated therebetween; and a master controller operatively connected to control operation of the integrated signal conditioning circuit so as to control the conditioning of at least one of the output signals and control signals being communicated therethrough, and to control operation of the at least one legacy controller.

In contrast to the present invention, Labview merely discloses a software-based development tool using the "G" dataflow language to prototype, design, test and implement instrument systems (see pages 1-1 to 1-3). Using this tool, a user can simulate the operation of an electrical or electronic device by defining the virtual instruments (VIs), functions, structure, terminals, user interface, and connections of a device using various menus and libraries within the software (see pages 1-4 to 1-6). However, unlike the present invention,

Labview fails to disclose, teach or suggest any structure or operation for, among other features, the combination of at least one legacy subsystem that generates discrete output signals; at least one legacy controller operatively coupled to receive the discrete output signals therefrom and to output control signals to the at least one legacy subsystem; an integrated signal conditioning circuit operatively connected between the at least one legacy subsystem and the at least one legacy controller so as to condition at least one of the output signals and control signals being communicated therebetween; and a master controller operatively connected to control operation of the integrated signal conditioning circuit so as to control the conditioning of at least one of the output signals and control signals being communicated therethrough, and to control operation of the at least one legacy controller.

In particular, Labview fails to specifically recite any of the features of the invention that the Examiner attributes to this reference. As a matter of fact, Labview fails to specifically recite any structure for any device, except for an example device that embodies at best a random number generator, a random plot, a time delay and a power input (see pages 2-6 to 2-17). There is not one structure, method or embodiment of any other apparatus or process disclosed in Labview, much less any structure or method that embodies all the features of the claimed invention. Rather, the Examiner appears to be imputing his own personal knowledge and his knowledge of the present invention into the reference, in effect arguing that the software disclosed in the reference must be capable of performing the functions of the claimed invention, and thus inherently embodies all the characteristics of the claimed invention. The Examiner is using his hindsight knowledge of the claimed invention to "program" in his own mind the characteristics of the claimed invention into the software of Labview. Even worse, the Examiner could extend the argument to say that, since any electrical or electronic device or system can be simulated by the software disclosed in Labview, any such electrical or electronic device would thereby be anticipated or rendered obvious by Labview. Applicant will contend that such an argument is improper.

The secondary references of Kreuter '557 and Licht '748 were merely cited for generally showing hardware implementations of signal conditioning I/O boards. However, since Labview as shown above fails to show or suggest any of the features of the present invention as claimed, neither of these references can make up for the deficiencies in Labview. In other words, even if all three references were combined, their combination would at best consist of a random number generator, a random plot, a time delay, a power input and two

implementations for a signal conditioning I/O board. Such a combination falls far short of embodying each and every feature of the claimed invention.

In view of all the above, Applicant will respectfully contend that the Examiner fails to establish a prima facie case of obviousness by properly bridging the proposed modification of the references necessary to arrive at the claimed subject matter (see MPEP §706.02(j)). It is well established that the Examiner is not allowed to select bits and pieces from each reference, and then combining those bits and pieces using knowledge or hindsight gleaned from the disclosure of the present invention as a guide to support the combination. Rather, each prior art reference must be evaluated as an entirety, and all of the prior art must be considered as a whole,” *Panduit Corp. v. Dennison Mfg. Co.*, 227 USPQ 337, 344 (Fed. Cir. 1985). See *Para-Ordinance Mfg, Inc. v. SGS Importers Intl., Inc.*, 73 F.3d 1085, 37 USPQ2d 1237 (Fed. Cir. 1995) (“Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor.”). In this case, the Examiner is using his hindsight knowledge of the claimed invention to read elements into the Labview reference that otherwise do not exist in the reference, and then citing two secondary references to show hardware without a clear showing of any motivation to combine the references.

It is well established that, to reach a non-hindsight driven conclusion as to whether a person having ordinary skill in the art at the time of the invention would have viewed the subject matter as a whole to have been obvious in view of multiple references, [one] must provide some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct. A suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. See *In re Leonard R. Kahn*, 441 F.3d 977, 78 USPQ2d 1329 (Fed. Cir. 2006), citing *In re Kotzab*, 217 F.3d 1365, 1370 (Fed.Cir. 2000).

In this case, Applicant would contend that the nature of the problem to be solved, namely what structure and operation to use in order to integrate legacy subsystems and legacy controllers having different discrete signal formats with modern control systems, would not have led one of skill in the art to combine the teachings of the cited references in the manner suggested by the Examiner. One of skill in the art may have thought to use Labview as a tool to help invent a solution to the problem, but not to embody the solution itself. Neither

Labview nor Krueter '557 nor Licht '748 provides any motivation for their combination in a manner even remotely similar to the claimed invention.

Consequently, Applicant will submit that there exist substantial differences between the structure and operation of the present invention and those of the prior art cited. Thus, Applicant will respectfully contend none of the cited references discloses, teaches or suggests any combination of elements or steps that embody each and every element of the present invention. As a result, the prior art cited cannot render any of the features of the claims invention obvious to one of skill in the art. The present invention as a whole is distinguishable and thereby allowable over the combination of these references.

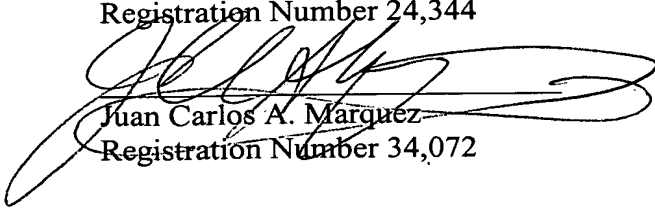
Conclusion

In view of all the above, Applicant respectfully submits that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient to establish that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

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